

## REMARKS

The present application was filed on April 30, 2001 with claims 1 through 17. Claims 1 through 17 are presently pending in the above-identified patent application.

In the Office Action, the Examiner rejected claim 1 under 35 U.S.C. §102(e) as being anticipated by Earls et al. (United States Patent Number 6,532,358). The Examiner also rejected claims 2, 4, and 6 under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Okamoto (United States Patent Number 6,614,855), rejected claim 3 under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Marchok et al. (United States Patent Number 5,790,514), and rejected claim 9 under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Okamoto, and further in view of Baldwin et al. (United States Patent Number 6,735,422). The Examiner indicated that claims 5, 7, and 8 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims, and that claims 10-17 are allowed.

Independent Claim 1

Independent claim 1 was rejected under 35 U.S.C. §102(e) as being anticipated by Earls et al.

Regarding claim 1, the Examiner asserts that Earls discloses adjusting said IF gain value (FIG. 1, element 22, and col. 3, lines 1-42) based on said monitored RF amplifier gain adjustment (FIG. 1, elements 14, 22, 26, 28, and 30; FIG. 3; and col. 3, line 17, to col. 4, line 4) by an amount approximately opposite to said RF gain value (FIG. 1, elements 24 and 30; and col. 3, line 1, to col. 4, line 4).

Applicant notes that, in the text cited by the Examiner, Earls teaches that the gains (IF and Wideband) are set during three specific steps (see, FIG. 3). Regarding the first step (entitled "SET WIDEBAND GAIN"), Earls teaches that

the controller 30 reads the output from the wideband detector 26, 28 and *sets a gain control value for the wideband variable gain input amplifier 14 in order to provide a nominal amplitude of the RF signal to the mixer stage 18.*

(Col. 3, lines 38-42.)

Regarding the second step (entitled "SET IF GAIN"), Earls teaches that

the controller 30 reads the output from the IF detector 24  
*and sets a gain control value for the IF amplifier 22 to provide a  
 maximum amplitude value for the IF signal to put it close to full scale  
 for the analog-to-digital converter (A/D) in the IF detector.*  
 (Col. 3, lines 43-47.)

Regarding the third step (entitled "RE-OPTIMIZE WB AND IF GAINS"),

Earls teaches that

the respective gains of the wideband and IF amplifiers may  
 be re-optimized by *increasing the IF gain by the specified dBm and  
 decreasing the wideband gain by the specified dBm.*  
 (Col. 3, lines 59-62.)

Independent claim 1, as amended, requires "adjusting said IF gain value  
*based on said monitored RF amplifier gain adjustment by an amount approximately  
 opposite to said RF gain value.*"

Thus, Earls et al. do not disclose or suggest adjusting said IF gain value  
 based on said monitored RF amplifier gain adjustment by an amount approximately  
 opposite to said RF gain value, as required by independent claim 1.

#### Additional Cited References

Okamoto was also cited by the Examiner for its disclosure of a receiver  
 for receiving broadcasting signals with an OFDM communication receiver. Okamoto  
 does not disclose or suggest, however, adjusting an IF gain value based on an RF gain  
 adjustment.

Thus, Okamoto does not disclose or suggest adjusting said IF gain value  
 based on said monitored RF amplifier gain adjustment by an amount approximately  
 opposite to said RF gain value, as required by independent claim 1.

Marchok et al. were also cited by the Examiner for its disclosure of a  
 receiver for receiving broadcasting signals with a DMT communication receiver.  
 Marchok does not disclose or suggest, however, adjusting an IF gain value based on an  
 RF gain adjustment.

Thus, Marchok et al. do not disclose or suggest adjusting said IF gain value based on said monitored RF amplifier gain adjustment by an amount approximately opposite to said RF gain value, as required by independent claim 1.

5 Baldwin et al. was also cited by the Examiner for its disclosure of a threshold for said signal energy measurement (that) is established to prevent clipping. Baldwin et al. does not disclose or suggest, however, adjusting an IF gain value based on an RF gain adjustment.

Thus, Baldwin et al. do not disclose or suggest adjusting said IF gain value based on said monitored RF amplifier gain adjustment by an amount approximately  
10 opposite to said RF gain value, as required by independent claim 1.

Dependent Claims 2-9 and 11-17

Dependent claims 2, 4, and 6 were rejected under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Okamoto, claim 3 was rejected under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Marchok et al., and  
15 claim 9 was rejected under 35 U.S.C. §103(a) as being unpatentable over Earls et al. in view of Okamoto, and further in view of Baldwin et al.

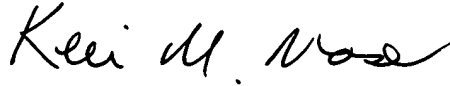
Claims 2-9 and 11-17 are dependent on claims 1 and 10, respectively, and are therefore patentably distinguished over Earls et al., Okamoto, Marchok et al., and Baldwin et al. (alone or in any combination) because of their dependency from  
20 independent claims 1 and 10 for the reasons set forth above, as well as other elements these claims add in combination to their base claim. The Examiner has already indicated that claims 5, 7, and 8 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims, and that claims 10-17 are allowed.

25 All of the pending claims, i.e., claims 1-17, are in condition for allowance and such favorable action is earnestly solicited.

If any outstanding issues remain, or if the Examiner has any further suggestions for expediting allowance of this application, the Examiner is invited to contact the undersigned at the telephone number indicated below.

The Examiner's attention to this matter is appreciated.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kevin M. Mason". The signature is fluid and cursive, with the first name "Kevin" being more legible than the last name "Mason".

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